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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bahlmann et al.
Serial No: 10/603,567
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For: MULTIFOLDED COMPOSITE TAPE FOR USE IN
CABLE MANUFACTURE AND METHODS FOR MAKING SAME

Examiner: Chau N. Nguyen
Art Unit: 2831

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION MAILED OCTOBER 21, 2004

Sir:

Responsive to the Office Action mailed October 21, 2004, Applicants submit this response to the issues raised therein.

AMENDMENTS

Amendment of Claims Pursuant to 37 C.F.R. § 1.121(c)

Applicants respectfully request amendment of claims 22-25 as provided below.

1. (Original) A tape for use within an interior defined by a cable jacket, the tape comprising:

two or more elongated fin-like members joined along their edges, each elongated fin-like member having a width extending radially from their edges and a length extending longitudinally parallel to and along their edges such that each pair of adjacent elongated fin-like members defines therebetween a channel, and each elongated fin-like member includes

an inner layer of dielectric material disposed between a first layer of conductive material and a second layer of conductive material such that the layers of conductive material face each other within each channel.

2. (Original) The tape of claim 1, wherein each elongated fin-like member is conformable such that the tape can be arranged within the cable jacket.
3. (Original) The tape of claim 1, wherein each pair of adjacent elongated fin-like members defines a void sufficient to accept at least one conductor.
4. (Original) The tape of claim 3, wherein each elongated fin-like member is conformable such that at least a portion of each pair of adjacent elongated fin-like members can wrap around the at least one conductor.
5. (Original) The tape of claim 1, wherein the width of each elongated fin-like member is greater than an internal radius of the cable jacket and wherein the internal radius is defined as a distance from a center point of an internal diameter of the cable jacket to an internal perimeter surface of the cable jacket.
6. (Original) The tape of claim 5, wherein each elongated fin-like member is conformable such that the tape can be arranged within the jacket.

7. (Original) The tape of claim 6, wherein each pair of adjacent elongated fin-like members defines a void sufficient to accept at least one conductor.
8. (Original) The tape of claim 7, wherein each elongated fin-like member is conformable such that at least a portion of each pair of adjacent elongated fin-like members can wrap around the at least one conductor.
9. (Original) The tape of claim 1, further comprising a layer of bondable material disposed directly between each of the first layer and the second layer of conductive material and the inner layer of dielectric material.
10. (Original) The tape of claim 9, wherein the layer of bondable material includes an adhesive coat.
11. (Original) The tape of claim 9, wherein the layer of bondable material includes a layer of heat fusible film.
12. (Original) The tape of claim 11, wherein the heat fusible film includes one or more compounds wherein each compound is selected from the group consisting of ethyl acrylic acid (EAA), ethyl vinyl acetate (EVA), thermoplastic polymer, and combinations thereof.
13. (Original) The tape of claim 1, wherein each layer of conductive material has a thickness of from about 0.00015 inch to about 0.006 inch.

14. (Original) The tape of claim 1, wherein each of the first layer and the second layer of conductive material includes a material selected from the group consisting of aluminum, copper, tinned copper, silver, steel and combinations thereof.
15. (Original) The tape of claim 1, wherein the inner layer of dielectric material includes a thickness of from about 0.0001 inch to about 0.006 inch.
16. (Original) The tape of claim 1, wherein the dielectric material includes a material selected from the group consisting of polyester, polypropylene, polyethylene, polyvinyl chloride, polyvinylidene fluoride, polyamide, polyimide and combinations thereof.
17. (Original) The tape of claim 1, wherein the two or more elongated fin-like members include four elongated members to define the tape with an X-shape cross-section and four channels.
18. (Original) The tape of claim 17, wherein each pair of adjacent elongated fin-like members defines a void sufficient to accept at least one conductor.
19. (Original) The tape of claim 18, wherein each elongated fin-like member is conformable such that at least a portion of each pair of adjacent elongated fin-like members can wrap around the at least one conductor.

20. (Original) The tape of claim 1, wherein the two or more elongated fin-like members includes multiple elongated fin-like members such that the tape has multiple channels and wherein each pair of adjacent elongated fin-like members defines a void sufficient to accept at least one conductor.

21. (Original) The tape of claim 20, wherein each elongated fin-like member is conformable such that at least a portion of each pair of adjacent elongated fin-like members can wrap around the at least one conductor.

22. (Currently Amended) A cable comprising:

a tubular jacket;

a tape disposed within the tubular jacket, the tape having two or more elongated fin-like members joined along their edges, each elongated fin-like member having a width extending radially from their edges and a length extending longitudinally parallel to and along their edges such that each pair of adjacent elongated fin-like members defines therebetween a channel, and each elongated fin-like member includes an inner layer of dielectric material disposed between a first layer of conductive material and a second layer of conductive material such that the layers of conductive material face each other within the channel; and
at least one conductor disposed in at least one channel, wherein at least a portion of the pair of adjacent elongated fin-like members defining the channel wraps around the conductor.

23. (Currently Amended) The tape cable of claim 22, wherein each elongated fin-like member is conformable such that the tape can be arranged within the tubular jacket.